

## NOTES ON MAMMALS

collected by Dr. H. SCHOUTEDEN in the Belgian Congo

by

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This part of the collection, which was made by Dr. SCHOUTEDEN on behalf of the Congo Museum, Tervueren, on the Lower Congo and Kasai Rivers, was sent to the British Museum for comparison with the types and series of specimens from the Congo in the possession of the latter. It has been found necessary to describe as new three forms, *Petrodromus tordayi tumbanus*, *Funisciurus mayumbicus* and *Protoxerus stangeri personatus*.

The paratypes of these, and certain other specimens Dr. SCHOUTEDEN has kindly presented to the British Museum.

As many of the localities given do not appear on ordinary maps, I have thought it well, on the first occurrence of such a name in this paper, to indicate its approximate position.

### I. — *Galago (Otogale) elegantulus*, LECONTE.

75. Kai Bumba, Upper Mayumbe.

The province of Mayumbe lies at the mouth of the Congo on the right bank.

In the *Proceedings of the Academy of Natural Sciences of Phila-*

*delphia*, 1857, p. 10, LECONTE gives descriptions of several new mammals from « Western Africa ». Hence this vague term has since been given by authors as the type locality of these species. But LECONTE says also that these mammals « were among a large collection of birds sent from Africa by M. DU CHAILLU ». Now this collection of birds is referred to in the same journal on pp. 1 and 33, where we learn that the type locality is the River Muni, which DU CHAILLU traced to its source.

I am not aware that attention has been called to this before, so would suggest that the « River Muni » should in future be cited as the type locality of the mammals described in the paper. These are *Colobus anthracinus* (which MATSCHIE thinks may possibly prove distinct from *C. satanas*), *Cercopithecus buccalis* (= *cephus*, L.), *Galago elegantulus*, *Vespertilio pusillus* (which I cannot identify), *Crocidura odorata*, *Aethosciurus poensis subviridescens*, *Funisciurus lemniscatus*, and *Myosciurus pumilus*.

2. — *Hemigalago demidoffi*, FISCHER.

604. Basongo, near the confluence of the Kasai and Sankuru Rivers.  
694. Luebo, Kasai, on the Lulua and Luebo Rivers, 50 miles above its junction with the Kasai,  $5^{\circ} 30' S.$ ,  $29^{\circ} 45' E.$   
693. Macaco near Luebo.  
663. Kamaiembi, near Luebo.

3. — *Eidolon helvum*, KERR.

399, 403. Kunungu, near Bolobo on the Congo.  
764. Tshikapa, Kasai River,  $6^{\circ} 45' S.$ ,  $21^{\circ} E.$   
781. Luebo.

4. — *Rousettus aegyptiacus*, GEOFF.

522. Kunungu, near Bolobo.

5. — *Hypsignathus monstrosus*, H. ALLEN.

195. Eala, Equator, on the Ruki.  
542. Luebo.

6. — *Epomophorus wahlbergi haldemani*, HALLOWELL.  
19, 25. Moanda, mouth of the Congo, north bank.

7. — *Micropteropus pusillus*, PET.  
124, 125, 126, 127, 128, 136, 147, 151. Boma, Lower Congo.

8. — *Megaloglossus woermannii*, PAGENST.  
308. Bikoro, Lake Tumba, one degree south of the Equator.

9. — *Taphozous mauritianus*, GEOFF.  
760. Tshikapa.

10. — *Nycteris major*, K. AND.  
692. Macaco, near Luebo.

11. — *Nycteris argo*, THOS.  
527. Luebo.

12. — *Nycteris macrotis*, DOBS.  
840. Kidada, near the Congo Railway, 60 miles below Leopoldville.

13. — *Nycteris hispida*, SCHREB.  
210. Eala  
469. Kwamouth.

14. — *Hipposideros caffer centralis*, K. AND.  
748. N'gombe, Kasai,  $7^{\circ} 25' S.$ ,  $20^{\circ} 10' E.$   
763. Tshikapa.

15 — *Pipistrellus nanus*, PET.  
800, 802. Luebo.  
740, 741, 742. N'gombe, Kasai.

288. Tondu, Lake Tumba.

768. Tshikapa.

16. — **Glauconycteris argentata**, DOBS.

130. Boma.

17. — **Glauconycteris variegata papilio**, THOS.

138. Boma.

18. — **Eptesicus grandidieri**, DOBS.

175. Kisantu, 35 miles below Leopoldville, near Thysville.

Since DOBSON described this bat from Zanzibar in 1876, only one specimen, so far as I know, has been noticed in mammalian literature. This is in the U. S. A. National Museum, and was obtained on the Southern Guaso Nyiro River in Kenya Colony by MEARNS (HOLLISTER, *Smithson. Inst. U. S. A. Mus., Bull.* 99, 1918). Evidently a rare bat but with a range right across Africa.

19. — **Eptesicus tenuipennis**, PET.

161, 164. Kisantu.

20. — **Eptesicus capensis**, A. SM.

650. Luebo.

21. — **Scotophilus nigrita**, SCHREB.

173. Kisantu.

22. — **Nyctinomus brunneus**, SEABRA.

188. Eala.

This specimen answers very well to SEABRAS description, except that the red colour seems more pronounced here. But its should be borne in mind that his specimens were in alcohol.

As regards the skull in the present case, it may be mentioned (1), that it has the high brain case of *ansorgei* and *cisturus*, not the flattened skull of *aegyptiacus* (2); that the anterior upper premolar is very large,

reaching almost to half the height of  $pm_1$ ; and (3) that the anterior lower premolar is less broad than  $pm_1$ . These points are not touched on by SEABRA.

The crowding together of the lower incisors, which he mentions, is very pronounced in this case, the exterior ones being completely concealed behind the interior.

DE WINTON, writing in 1901, thought that *N. brunneus* might possibly be the same as *N. aegyptiacus*, but, if I am right in this identification, the two species have nothing in common with one another.

There are no examples of *brunneus* in the British Museum collection for comparison, nor does the species appear to have come to light anywhere since SEABRA described it in 1900.

### 23. — *Chaerephon limbatus*, PET.

884. Makaia N'tete, Lower Mayumbe.

847. Kidada.

332, 334. Bolobo, R. Congo.

143, 145, 146. Boma.

162, 167, 169, 181. Kisantu.

In determining these specimens it has been necessary to go into the question of the status of *C. frater*, ALLEN, from Malela, 25 miles below Boma, on the Congo, and *C. (Lophomops) cristatus*, ALLEN, from Boma itself.

There appears to be little difference between these two species except that the males of the former are said to have no tuft on the interaural membrane, but only a bare spot on the crown behind the membrane. In *cristatus* this bare spot is covered by the tuft when at rest and not erected.

In distinguishing *frater* from *limbatus*, ALLEN refers to the absence of the tuft in *frater*, and goes on to say « the absence of the white on the lower parts, » (i. e. in *limbatus*) « and the character of  $p_2$ , would also exclude *limbatus* from further consideration in this connection ».

As to  $p_2$ , I find that its position varies in different skulls, and is not a permanent character, while the presence of white on the underparts is a characteristic feature of *limbatus*.

Now concerning the tuft. This tuft is found on males in *C. limbatus*, *pumilus*, and *hindei*, and arises in each case from the back of the membrane connecting the ears (ALLEN's sub-genus *Lophomops*, in which he includes his species *chapini*, *cristatus*, and *abae*). It will probably be found to occur in other species such as *emini*. When at rest the tuft covers a bald patch on the crown of the head. The tuft is a sexual character and is wanting in the females, but it is curious to find that quite a number — about 50 % — of these show the bald patch on the crown.

In males the bald patch is always present, but in young specimens the tuft is lacking. It is difficult to know at what age and in what circumstances the crest is developed. Out of seven *limbatus* taken on the same day, and probably from the same roost, at Mombasa by Mr. ARTHUR LOVERIDGE, five are without the tuft, although they appear in other respects adult.

These considerations lead me to think that *C. limbatus*, *frater*, and *cristatus* are one and the same bat.

24. — *Mops thersites*, THOS.

514, 513. Luebo.

25. — *Chaerephon* sp.

162. Kisantu.

Perhaps a young *limbatus*. The skull labelled with this number belongs to a *Plecotus*.

26. — *Petrodromus tordayi*, THOS.

691. Macaco, near Luebo.

27. — *Petrodromus tordayi tumbanus*, subsp. n.

299, 307. Bikoro, Lake Tumba.

A richly coloured race of *tordayi*, with the undersurface strongly suffused with ochraceous, and with very dark underfur.

General colour above between chestnut and vandyke brown, the hairs except at the tip being slate-black. Flanks and sides a rich

tawny, which on the tights is tinged with rufous. Underparts ochraceous buff, bases of the hairs blackish slate. Face markings very much as in *tordayi*. The large crescent-shaped slaty patch behind and below the level of the ear in *tordayi* is almost wholly wanting in *tumbanus*, it being replaced by a very small horse-shoe shaped mark, separated from the anterior dark markings by the ground colour. Hands, feet, thighs and tail quite as in *tordayi*.

*Type.* Adult, collected by Dr. H. SCHOUTEDEN; in the Musée du Congo Belge, Tervueren.

Dimensions of the type, measured in the skin: — tail, 129; hind foot, 54. Other measurements cannot be accurately taken, but the size is that of *tordayi*.

28. — **Nasilio brachyurus**, Boc.

896. Kabambaie.

29. — **Sylvisorex gemmeus infuscus**, THOS.

115. Ganda Sundi, Mayumbe.

30. — **Crocidura angolae**, DOLLM.

892. Luebo.

31. — **Crocidura bovei**, DOBS.

891. Luebo.

32. — **Crocidura jacksoni denti**, DOLLM.

424. Mongende, near Bolobo.

33. — **Crocidura sp.**

719. Makumbi. No skull. In size and colour like *C. nigricans*, Boc.

34. — **Chrysochloris leucorhina**, HUET.

480. Kwamouth.

35. — *Anomalurus beldeni*, DU CHAILLU.

81. Kisala, Upper Mayumbe.

Practically a topotype of *A. chrysophaenus*, DUBOIS, showing that this is unquestionably a synonym of *beldeni*.

36. — *Anomalurus jacksoni*, DE WINT.

712. Kabambaie, Kasai, 5° 30' S., 21° E.

37. *Anomalurus (Anomalurops) beecrofti*, FRASER.

510. Luebo, Kasai.

873. Makaia N'tete, Lower Mayumbe.

38. — *Heliosciurus rufobrachium aubryi*, M.-EDW

776, 777. Kabambaie, Kasai.

485. Basongo, Kasai River.

259. Tondu, Lake Tumba.

420. Mongende, near Bolobo.

103. M'buma, near Ganda Sundi, Mayumbe.

55, 112. Ganda Sundi.

The skull of 776 has an extra premolar,  $pm_3$ , very small on each side of the upper jaw, — an interesting instance of reversion to an ancestral type. Dr. SCHOUTEDEN has kindly presented this specimen to the British Museum.

39. — *Heliosciurus rhodesiae loandicus*, THOS.

429. Kwamouth.

838. Kidada, R. Congo.

15. Kifuku, Mayumbe.

40. — *Funisciurus anerythrus*, THOS.

211. Eala, Equator.

354, 376, Kunungu, near Bolobo.

486, 489. Basongo, Kasai River.

540, 603. Luebo.

41. — *Funisciurus congicus*, KUHL.

458. No locality given.

42. — *Funisciurus congicus interior*, THOS.

795, 804. Luebo.

505. Basongo.

467. Kwamouth.

678. Macaco, near Luebo.

747. N'gombe, Kasai.

730. Tshisika, Kasai, near Angolan frontier.

Nos. 505, 747, and 730 are duller in colour than the type of *interior*. This is probably due to the type specimen being a young one.

43. — *Funisciurus mayumbicus*, sp. n.

42, 52, 53 (type), Ganda Sundi, Mayumbe Province, at the mouth of the River Congo, north bank.

94. Kisala, Upper Mayumbe.

879. Makaia n'tete, Lower Mayumbe.

Related to *F. lemniscatus*, but with buff underparts, no rufous tinge, and a narrower skull.

General colour paler than in *lemniscatus*, greenish yellow without rufous tinge. The four dark dorsal stripes seal brown, ticked out with tawny ochraceous. Median light stripe faint, the same colour as the body. Outer light stripes and sides light yellowish grey. The light rings of the tail hairs buff, except at the distal end, where they become tawny ochraceous. Conspicuous buff ring round the eye. Hands and feet ochraceous buff. Entire undersurface pure buff in the type specimen, cream-buff in no 52. Hairs of underparts unicolor on the belly, and with very short slaty bases elsewhere in the type, while in no 52 they are practically unicolor throughout.

Type, adult ♀, in the Musée du Congo Belge, Tervueren, Belgium. Original number 53, collected by Dr. H. SCHOUTEDEN.

Dimensions of the type, (taken from the skin) : — head and body, 185 mm.; tail vertebrae, 165; hind foot (c) 38; ear, 13.

Skull : greatest length, 43; condylo-incisive length 38; interorbital

breadth, 11; breadth across post-orbital processes, tip to tip, 17; breadth of braincase, 19; teeth well worn.

*F. mayumbicus* is a well-marked species; readily distinguished from *lemniscatus* by its colour, and by the narrow skull with its prominently rounded braincase.

JENTINK (Notes Leyd. Mus. IV, 1882, p. 36). makes *F. sharpei*, GRAY, and *F. isabella*, GRAY, synonyms of *lemniscatus*. This is certainly correct so far as *sharpei* is concerned, but *isabella* is quite a different species, as an examination of the type in the British Museum shows. The B. M. has a good series of both species. They are found dwelling side by side on the Ja River.

44. — **Protoxerus stangeri dissonus**, THOS.

197, 216. Eala, Equator.

45. — **Protoxerus stangeri signatus**, THOS.

409. Mongende, Bolobo.

536. Luebo.

702. Macaco, near Luebo.

The Macaco specimen is greyer on the head and shoulders than is usual in this form.

46. — **Protexerus stangeri personatus**, subsp. n.

874, (type). Makaia N'tete, Lower Mayumbe, near the mouth of the Congo, north bank.

109. Ganda Sundi, Mayumbe.

Similar in appearance to *P. s. nigeriae*, from which it differs in the following points : — (1) speckling of the body a deeper, golden yellow; (2) head pure black speckled with white, sharply defined from body colour; (3) hairs of throat and chest not wholly white, having black bases; (4) upper surface of fore feet rufous; (5) no white line at the side of the belly; (6) tail red and black for proximal two-thirds, white and black for distal third.

Type (juv.) collected by Dr. H. SCHOUTEDEN, in the Musée du Congo Belge, Tervueren.

Dimensions of the type, measured in the skin (the figures in brackets refer to no. 109, an adult) : head and body, 236, (280); tail, 273, (342); hind foot without claws, 58, (60). Skull : greatest length, 56.

The resemblance of *personatus* to *nigeriae* is only superficial, the differences in detail being numerous.

*Personatus* from *persona*, a mask.

47. — **Graphiurus murinus**, DESM.

893. Luebo.

48. — **Dendromus (Poemys) pecilei**, M.-EDW.

550, 628. Luebo.

49. — **Thamnomys rutilans**, PET.

516, 584, 586. Luebo.

680, 697, Macaco near Luebo.

669, 671. Kamaiembi, near Luebo.

50. — **Aenomys hypoxanthus**, PUCH.

517, 557, 648. Luebo.

51. — **Rattus rattus**, LINN.

11. Banana, coast district.

52. — **Rattus rattus alexandrinus**, GEOFF.

8. Boma.

29. Moanda.

53. — **Rattus rattus frugivorus**, RAF.

18. Moanda.

850. Kidada.

447, 448, Kwamouth.

207, Eala, Equator.

533, 566, 571, 572, 577. Luebo.

54. — **Rattus** sp.

832. Kidada.

Too young for identification.

55. — **Rattus (Aethomys) bocagei**, THOS.

114, 58. Ganda Sundi.

446. Kwamouth.

833 (juv.) Kidada.

56. — **Rattus (Aethomys) longicaudatus**, TULL.

601. Luebo.

57. **Rattus (Praomys) tullbergi**, THOS.

569, 573, 576, 587, 593, 633, 651. Luebo.

384. Kunungu, near Bolobo.

45, 47. Ganda Sundi

79. Kisala, Upper Mayumbe River.

58. — **Rattus (Praomys) stella**, THOS.

88. Lundu, Upper Mayumbe.

59. — **Rattus (Praomys) oeta**, THOS.

851. Temvo, Lower Mayumbe.

60. — **Rattus (Mastomys) coucha** SMITH.

100. M'buma, near Ganda Sundi.

172, 183. Kisantu.

269, 270. Tondu, Lake Tumba.

729. Tshikapa, Kasai.

580. Luebo.

61. — **Rattus** sp.

47. Ganda Sundi.

Too young for identification.

62. **Mus musculus**, LINN.

547, 552. Luebo.

63. — **Leggada musculoides**, TEMM.

582. Luebo.

177, 179. Kisantu.

64. — **Malacomys wilsoni**, THOS.

545. Luebo.

The greyish white frontal patch in the type specimen of this species seems to be due to the brown tips of the hairs having got worn off in some manner.

This southern form of *Malacomys* appears to be exceptionally long in the tail. The end of the tail in the type specimen is missing, but the present specimen has a tail 205 mm. in length, while one in the B. M. collection has one almost as long.

65. — **Cricetomys emini sanctus**, HINT.

375. Kunungu, near Bolobo.

66. — **Cricetomys sp.**

117. (juv.) Ganda Sundi.

This may be *C. dissimilis*, ROCHBR. It is impossible to tell from ROCHEBRUNES description whether *dissimilis* is one of the harsh-furred or one of the soft-furred species. In any case, the present specimen is much too young for identification.

67. — **Lophuromys sikapusi**, TEMM.

570. Luebo.

68. — **Lophuromys rita**, DOLLM.

894. Kabambaie.

69. — **Colomys bicolor**, THOS.

895. Luebo.

70. — *Dasymys bentleyae*, THOS.

546, 652. Luebo.

71. — *Pelomys campanae*, HUET.

492, 500. Basongo, Kasai River.

72. — *Hybomys univittatus*, PET.

104. Ganda Sundi.

73. — *Lemniscomys striatus*, LINN.

46. Ganda Sundi, Mayumbe.

823. Kwamouth.

497. Basongo, Kasai River.

522. Luebo.

74. — *Lemniscomys griselda*, THOS.

750. N'gombe, Kasai.

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